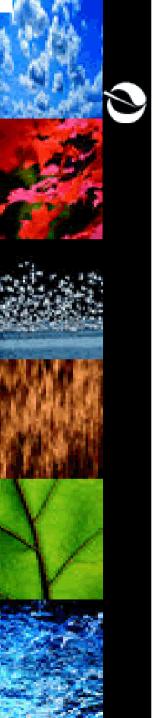


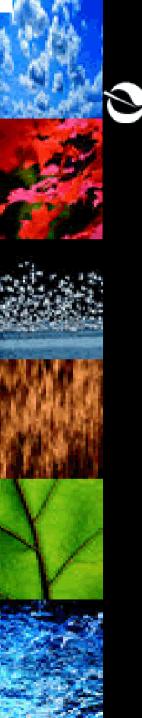
California Human Health Screening Levels:

Users Manual

Los Angeles Brownfields Conference November 18, 2004



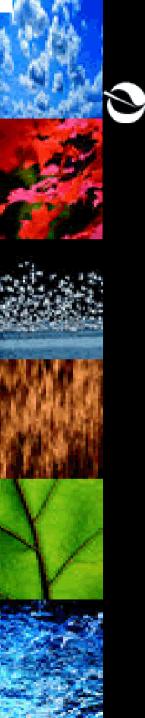
Use of California Human Health Screening Levels (CHHSLs) in Evaluation of Contaminated Properties



Purpose of Users Manual

- OEHHA, State and Regional Boards, and DTSC collaborated on screening values
- Two sets of numbers:
 - Unrestricted land uses
 - Restricted, nonresidential land use

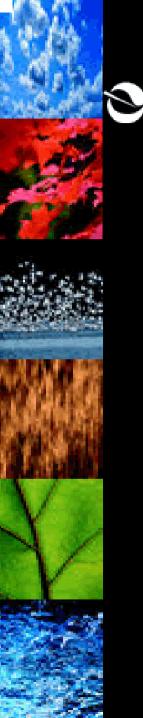




Purpose of Users Manual

- Numbers need context
- How they are used is possibly more important than that they exist

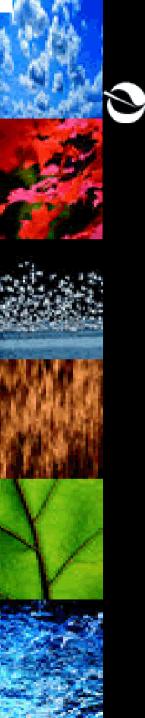




Contents of Users Manual

- Introduction
- Look-up Tables
- When to do site-specific risk assessments
- Discussion of other concerns (environmental and ecological)
- References





Introduction

- Purpose of screening values
- Risk assessments tiered approach
- What to do if you have chemicals not on the list
- Limitations of screening values



Environmental Concerns INDOOR AIR Nuisance Human Health Terrestrial Habitats Direct Exposure

Groundwater Protection (leaching)

SOIL

Aquatic Habitats

GROUNDWATER

Nuisance

Human Health Vapors to Indoor Air

SOIL GAS

Drinking Water

Environmental Concerns

INDOOR AIR

Terrestrial Habitats

Nuisance Human Health

Vapors to Indoor Air

Direct Exposure

SOIL

SOIL GAS

Groundwater Protection (leaching)

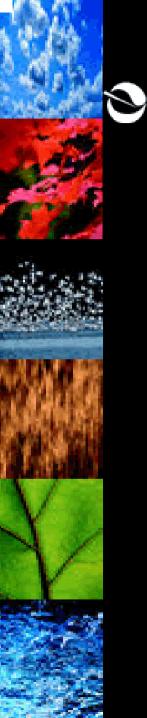
Aquati Habita

GROUNDWATER

Human Health Vapors to Indoor Air

Drinking Water

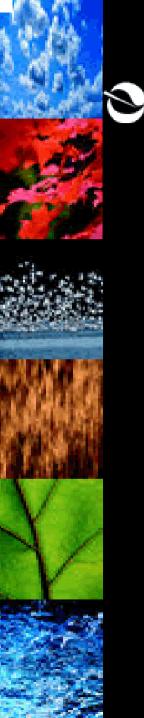
Nuisance



Look-Up Tables

- Organization of tables
- Conceptual site models
- Using the look-up tables
 - Direct exposure to soils
 - Vapor intrusion/Indoor air exposure

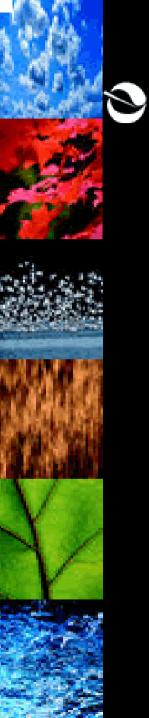




Special Considerations

- Laboratory reporting limits v. measured concentrations
- Background concentrations
- Cumulative risk multiple contaminants
- School sites
- CHHSLs v. cleanup numbers

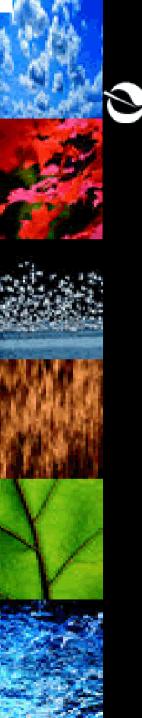




CHHSLs v. Site Specific Risk Assessment

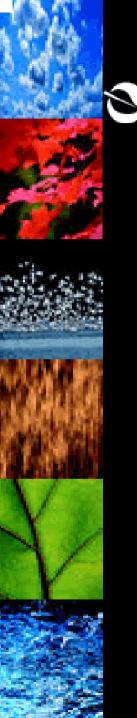
- Site considerations
- Site specific risk assessments
 - When appropriate
 - Site specific adjustments
- Baseline risk assessments





Other Concerns

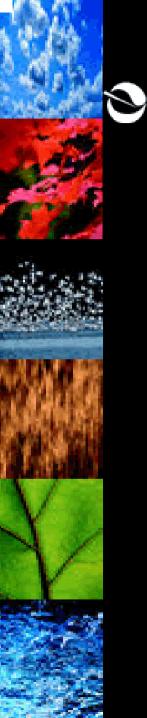
- CHHSLs to address human health risks only
- Some contaminants pose other risks
 - Threats to water quality (surface water and groundwater)
 - Threats to aquatic and terrestrial organisms
 - Nuisance concerns (odors, etc.) and/or resource degradation



Relationship to Other Values

- U.S.EPA Preliminary Remedial Goals (PRGs)(Region IX, other Regions)
- U.S.EPA Soil Screening Guidance
- San Francisco Regional Board Environmental Screening Levels
- City of Oakland Screening Levels (Los Angeles and other cities?)
- Hazardous Waste Levels
- TSCA PCBs
- OSHA Permissible Exposure Limits

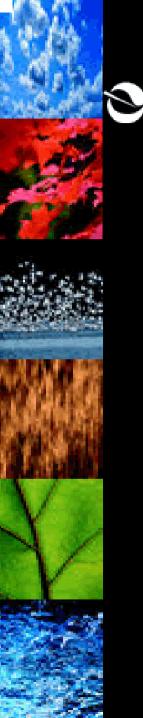




Next Steps

- Finalize CHHSLs and Users Manual
- Three public workshops to be held throughout State
 - Discuss the screening numbers
 - Receive public comments





Next Steps

- State and Regional Boards discussing ways to incorporate environmental and water quality issues
- Revise CHHSLs as appropriate
 - Update numbers
 - New chemicals

